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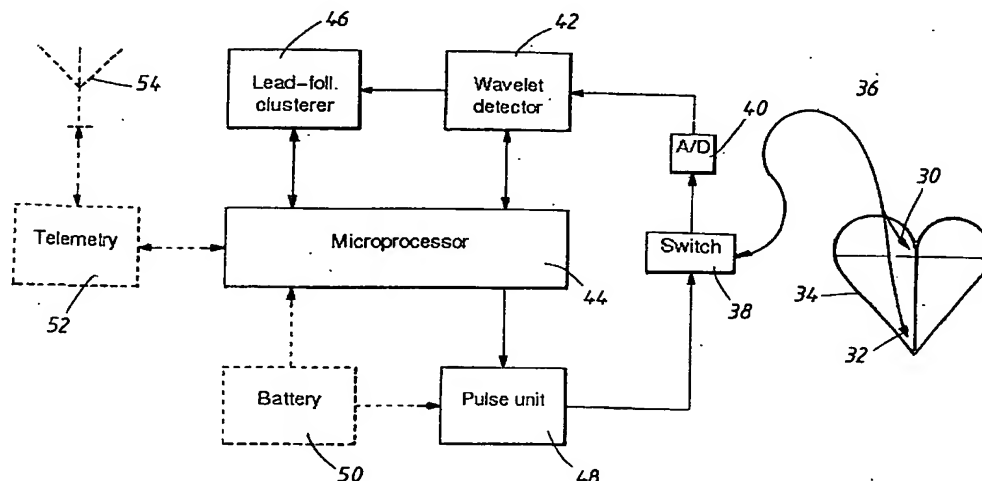
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(54) Title: APPARATUS FOR ANALYSING CARDIAC EVENTS

(57) Abstract: An apparatus for analysing cardiac events detected in electrograms, EGMs, comprises a feature extraction means provided to derive features of said cardiac events for discriminating different kinds of detected cardiac events. A clusterer is provided to group cardiac events with similar features into a cluster, defined by predetermined cluster features. The feature extraction means is adapted to determine a feature vector describing waveform characteristics of cardiac event EGM signals by a wavelet transform. The clusterer is adapted to determine the distance between the feature vector and corresponding cluster feature vectors to assign the cardiac event in question to that cluster which results in a minimum distance, provided that said minimum distance is less than a predetermined threshold value. A heart stimulator is provided with such an apparatus for arrhythmia detection and control means for controlling the therapeutic stimulation depending on the arrhythmia detection.

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